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Certification Code: **iFqq.8Enm.GBqL**



CERTIFICATE

Exam Version: **PCAP-31-03**
Date Certified: **July 30, 2021**

Scope:

- Modules and Packages (12%)
- Exceptions (14%)
- Strings (18%)
- Object-Oriented Programming (34%)
- Miscellaneous (List Comprehensions, Lambdas, Closures, and I/O Operations) (22%)

of proficiency in the
Python programming language

Pushpak Vijay Katkhede

PCAP - Certified Associate in Python Programming




Christopher Boguslawski
President, Python Institute



Pushpak Katkhede

has successfully completed the AWS Certification requirements and has achieved their:

AWS Certified Cloud Practitioner

Issue Date

Jun 17, 2021

Expiration Date

Jun 17, 2024

A handwritten signature in black ink that reads "Maureen Lonergan".

Maureen Lonergan
Director, Training and Certification

Validation Number FK41QDZDLMQE1ZGG
Validate at: <http://aws.amazon.com/verification>

Microsoft Certified Azure Fundamentals

PUSHPAK VIJAY KATKHEDE

Has successfully completed the requirements to be recognized as a Microsoft Certified: Azure Fundamentals.

Date of achievement: April 09, 2021



A handwritten signature in black ink, appearing to read "N. Nadella".

Satya Nadella
Chief Executive Officer



Certification number: H749-6058

PCAP: Programming Essentials in Python

Statement of Achievement

Presented To:

Pushpak Katkhede

Name

During the Cisco Networking Academy® self-paced course, the student has studied the following Skills:

- the universal concepts of computer programming (i.e. variables, flow control, data structures, algorithms, conditional execution, loops, functions, etc.);
- developer tools and the runtime environment;
- the syntax and semantics of the Python language;
- the fundamentals of object-oriented programming and the way they are adopted in Python;
- the means by which to resolve typical implementation problems;
- the writing of Python programs using standard language infrastructure;
- fundamental programming techniques, best practices, customs and vocabulary, including the most common library function in Python 3;



Maciej Wichař
VP.OpenEDG Python Institute

29 Nov 2020

Date

By completing the course, the student is now ready to attempt the qualification PCAP-Certified Associate in Python Programming certification, from the OpenEDG Python Institute.

www.netacad.com|www.pythoninstitute.org



9 Courses



Nov 29, 2020

Pushpak Vijay Katkhede

has successfully completed the online, non-credit Professional Certificate

A handwritten signature in black ink that reads "Rav Ahuja".

Rav Ahuja
AI & Data Science
Program Director
IBM Skills Network

IBM Data Science

In this Professional Certificate learners developed and honed hands-on skills in Data Science and Machine Learning. Learners started with an orientation of Data Science and its Methodology, became familiar and used a variety of data science tools, learned Python and SQL, performed Data Visualization and Analysis, and created Machine Learning models. In the process they completed several labs and assignments on the cloud including a Capstone Project at the end to apply and demonstrate their knowledge and skills.

- What is Data Science?**
- Tools for Data Science**
- Data Science Methodology**
- Python for Data Science and AI**
- Databases and SQL for Data Science**
- Data Analysis with Python**
- Data Visualization with Python**
- Machine Learning with Python**
- Applied Data Science Capstone**

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
coursera.org/verify/professional-cert/PHFBWNP4G54H



4 Courses

Python for Data Science and AI

Data Analysis with Python

Data Visualization with Python

Applied Data Science Capstone



Nov 29, 2020

Pushpak Vijay Katkhede

has successfully completed the online, non-credit Specialization

Applied Data Science

In this specialization learners developed and honed skills for practical data science and machine learning problems. The specialization included learning Python, as well as performing data analysis, and creating data visualizations using Python. Learners also completed a Capstone project to apply and demonstrate their newly acquired knowledge and skills.

A handwritten signature in black ink, appearing to read "Joseph Santarcangelo".

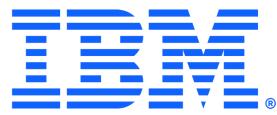
Joseph Santarcangelo
Senior Data Scientist
IBM

A handwritten signature in black ink, appearing to read "Alex Akison".

Alex Akison, Ph.D.
Data Scientist

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

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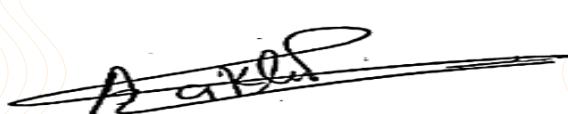
Nov 29, 2020

Pushpak Vijay Katkhede

has successfully completed

Applied Data Science Capstone

an online non-credit course authorized by IBM and offered through Coursera



Alex Aklson, Ph.D.
Data Scientist

COURSE CERTIFICATE



Verify at coursera.org/verify/KPRWKXTARGYR

Coursera has confirmed the identity of this individual and their participation in the course.



4 Courses

What is Data Science?
Tools for Data Science
Data Science Methodology
Databases and SQL for Data Science

Oct 10, 2020

Pushpak Vijay Katkhede

has successfully completed the online, non-credit Specialization

Introduction to Data Science

In this Specialization learners developed foundational Data Science skills to prepare them for a career or further learning that involves more advanced topics in Data Science. The specialization entailed understanding what is Data Science is and the various kinds of activities that a Data Scientist's perform. It familiarized learners with various open source tools, like Jupyter notebooks, used by Data Scientists. It taught them about methodology involved in tackling data science problems. The specialization also provided knowledge of relational database concepts and the use of SQL to query databases. Learners completed hands-on labs and projects to apply their newly acquired skills and knowledge.

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.



Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

Polong Lin
Data Scientist, IBM

Alex Akson, Ph.D.
Data Scientist

Rav Ahuja
AI & Data Science
Program Director
IBM Skills Network

Hima Vasudevan
IBM

Svetlana Levitan
Senior Developer
Advocate
IBM Center for Open
Data and AI
Technologies

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CERTIFICATE OF PARTICIPATION

This is to certify that
Pushpak Katkhede

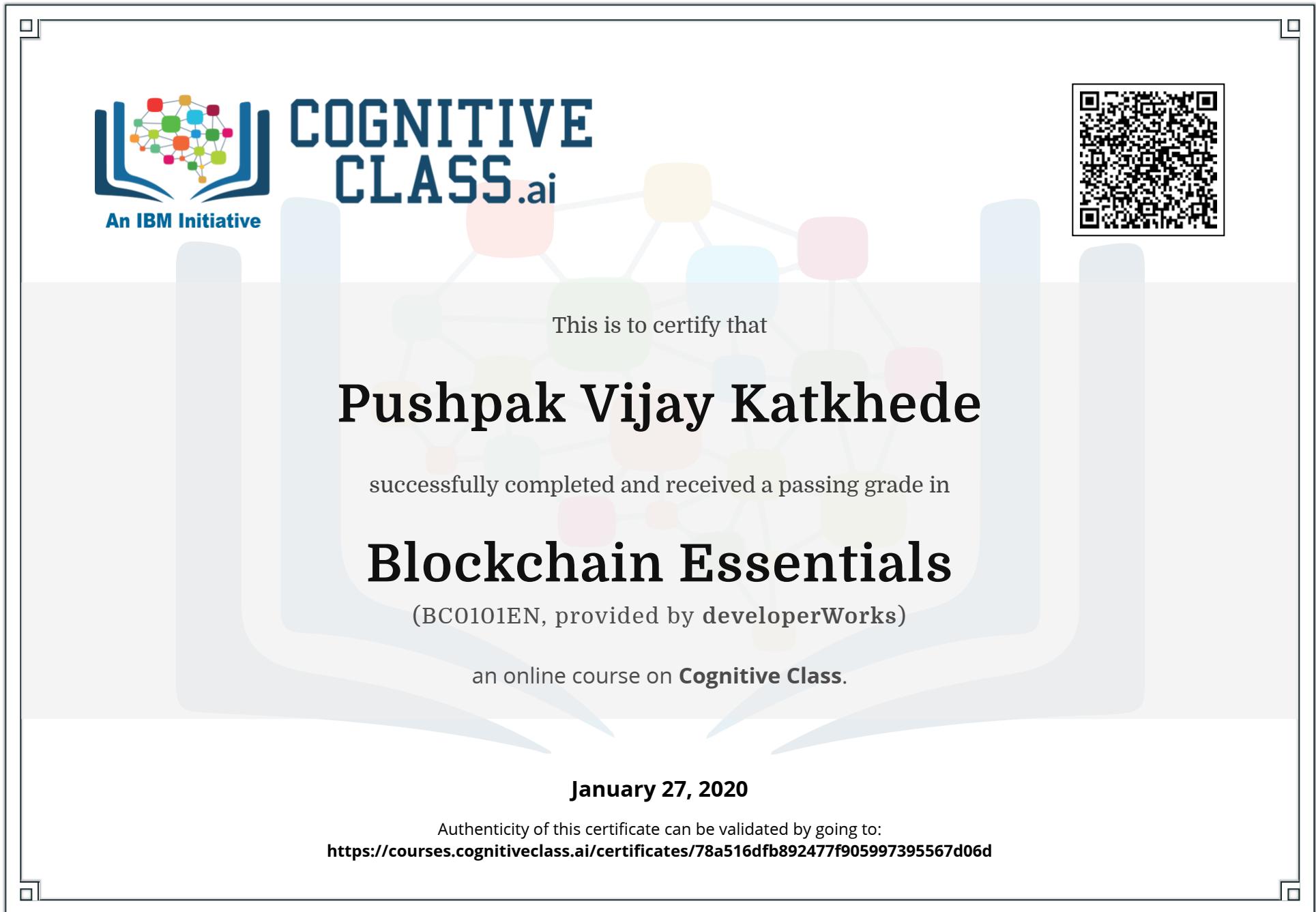
Has successfully attended Webinar on Artificial Intelligence
with Er. Karan Arora (Founder & CEO - Itronix Solutions)
held on 11th July, 2020 by Itronix Solutions

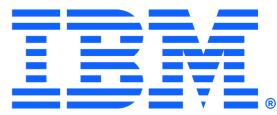
July 11, 2020

Date



Signature





Oct 10, 2020

Pushpak Vijay Katkhede

has successfully completed

Data Analysis with Python

an online non-credit course authorized by IBM and offered through Coursera

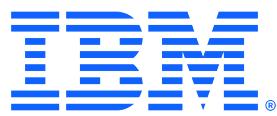
Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE CERTIFICATE



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29.09.2020

Pushpak Vijay Katkhede

has successfully completed

Data Science Methodology

an online non-credit course authorized by IBM and offered through Coursera



Alex Aklson, Ph.D.
Data Scientist



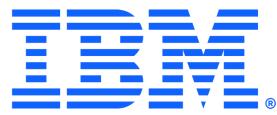
Polong Lin
Data Scientist, IBM

COURSE CERTIFICATE



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their participation in the course.



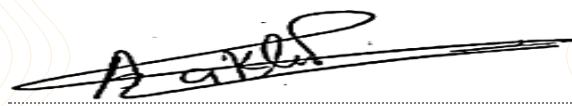
Oct 10, 2020

Pushpak Vijay Katkhede

has successfully completed

Data Visualization with Python

an online non-credit course authorized by IBM and offered through Coursera


Alex Aklson, Ph.D.
Data Scientist

COURSE CERTIFICATE



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Oct 10, 2020

Pushpak Vijay Katkhede

has successfully completed

Databases and SQL for Data Science

an online non-credit course authorized by IBM and offered through Coursera

Hima

Hima Vasudevan
IBM

Rav Ahuja

Rav Ahuja
AI & Data Science Program Director
IBM Skills Network

COURSE CERTIFICATE



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Coursera has confirmed the identity of this individual and their participation in the course.



Oct 11, 2020

Pushpak Vijay Katkhede

has successfully completed

Introduction to Artificial Intelligence (AI)

an online non-credit course authorized by IBM and offered through Coursera

Rav Ahuja
AI & Data Science Program Director
IBM Skills Network

COURSE CERTIFICATE



Verify at coursera.org/verify/95AB48PFZ2NG

Coursera has confirmed the identity of this individual and their participation in the course.



08/28/2020

Pushpak Vijay Katkhede

has successfully completed

Machine Learning for Business Professionals

an online non-credit course authorized by Google Cloud and offered through Coursera

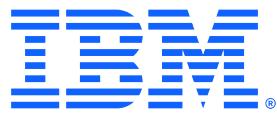
Google Cloud Training

COURSE CERTIFICATE



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their participation in the course.



25.09.2020

Pushpak Vijay Katkhede

has successfully completed

Machine Learning with Python

an online non-credit course authorized by IBM and offered through Coursera

Saeed A.

Saeed Aghabozorgi
Sr. Data Scientist
IBM



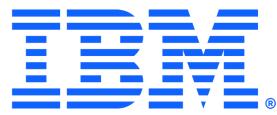
Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE CERTIFICATE



Verify at coursera.org/verify/S2SCBHL7JGZ5

Coursera has confirmed the identity of this individual and
their participation in the course.



Oct 10, 2020

Pushpak Vijay Katkhede

has successfully completed

Python for Data Science and AI

an online non-credit course authorized by IBM and offered through Coursera

Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE CERTIFICATE



Verify at coursera.org/verify/JH9AL3H7FBA5

Coursera has confirmed the identity of this individual and their participation in the course.



deeplearning.ai

Dec 14, 2020

Pushpak Vijay Katkhede

has successfully completed

Structuring Machine Learning Projects

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A handwritten signature in blue ink that reads "Andrew Ng".

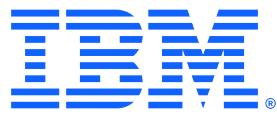
Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/8H7UYQHF3WXH

Coursera has confirmed the identity of this individual and their participation in the course.



28.09.2020

Pushpak Vijay Katkhede

has successfully completed

Tools for Data Science

an online non-credit course authorized by IBM and offered through Coursera

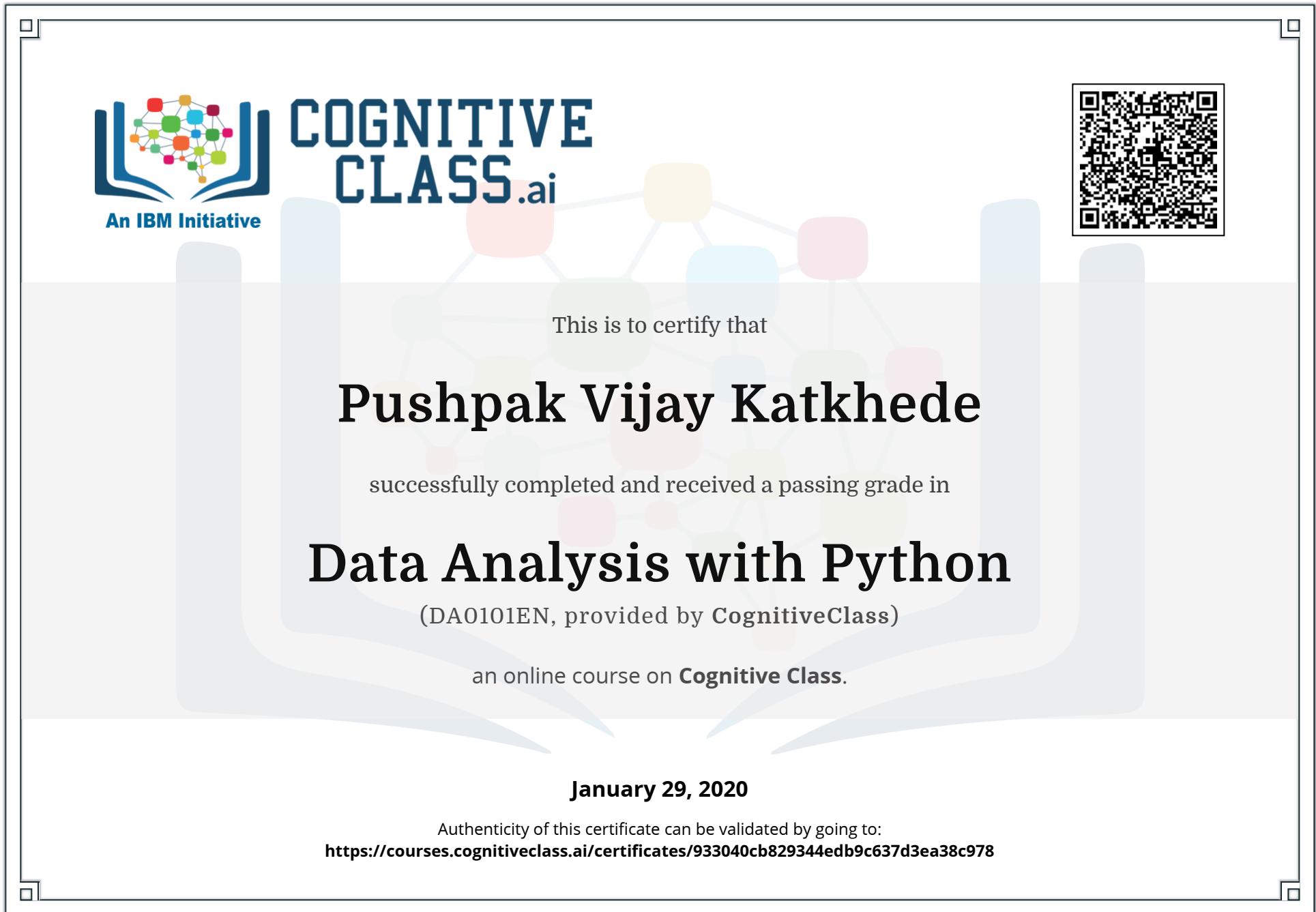
Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

Svetlana Levitan
Senior Developer Advocate
IBM Center for Open Data and AI Technologies

COURSE CERTIFICATE



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their participation in the course.





This is to certify that
Pushpak Vijay Katkhede

successfully completed and received a passing grade in
Data Visualization with Python
(DV0101EN, provided by Cognitive Class)

A course on cognitiveclass.ai
Powered by IBM Developer Skills Network.

Issued by
Cognitive Class

July 12, 2020

Authenticity of this certificate can be validated by going to:
<https://courses.cognitiveclass.ai/certificates/357416ff6b104d1baa2b98b05f5ed0c8>

Certificate of Completion

Pushpak Vijay Katkhede

Privacy@IBM: 2020 Data Privacy Training

11/6/2020



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CONTROL ID: VUDHIDVQGAOPPVZNTAYA

Cambashi Ltd
52 Mawson Road, Cambridge
CB1 2HY, UK

The certificate is presented to

Katkhede, Pushpak Vijay

for successfully completing

Cambashi ItM
Industry Focus: Chemicals

QAS Self Study Program

Specialized Knowledge
(Field of Study)

Date Completed 07/22/2020

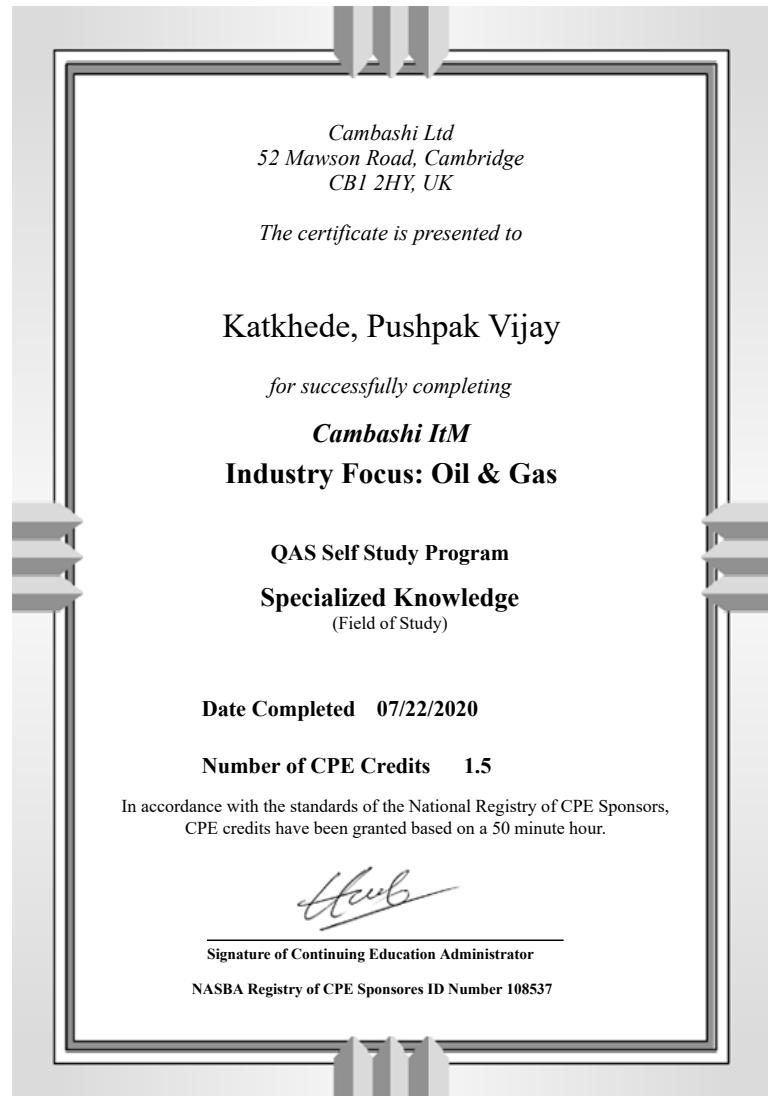
Number of CPE Credits 1

In accordance with the standards of the National Registry of CPE Sponsors,
CPE credits have been granted based on a 50 minute hour.



Signature of Continuing Education Administrator

NASBA Registry of CPE Sponsors ID Number 108537





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This is to certify that

Pushpak Vijay Katkhede

successfully completed and received a passing grade in

Introduction to Data Science

(DS0101EN, provided by Cognitive Class)

an online course on **Cognitive Class**.**January 30, 2020**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/e1c78e97bde24a94b90d373e153d3c20>



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This is to certify that

Pushpak Vijay Katkhede

successfully completed and received a passing grade in

Python 101 for Data Science

(PY0101EN, provided by Cognitiveclass)

an online course on **Cognitive Class**.**January 28, 2020**

Authenticity of this certificate can be validated by going to:

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